Claims

What is claimed is

1. A method for grouping technical devices being nodes of a
   network, the nodes being capable of providing services or
   resources to other nodes of the network and using
   services or resources provided by other nodes of the
   network, wherein a unique label is used for identifying
   the group, and a unique label is used for identifying an
   individual node, **characterized in**
   - said group label being created automatically when two
     nodes are connected, and neither of said two nodes is
     already labelled as being member of a group of nodes;
   - said group label being assigned automatically to said
     two nodes;
   - said group label being assigned automatically to other
     nodes when being connected to said group of nodes; and
   - a node having not more than one group label assigned.

2. Method according to claim 1, wherein said group label is
   newly determined and assigned dynamically to all nodes
   belonging to said group of nodes whenever one or more
   nodes are added to or removed from said group of nodes.

3. Method according to claim 1, wherein the nodes are under
   control of the same user.

4. Method according to claim 1, wherein two different groups
   of nodes may be merged into one group, the merging
   process comprising modification of the affected nodes'
   group label such that a common group label is assigned to
   the affected nodes.

5. Method according to claim 1, wherein a group of nodes may be split into two or more groups of nodes, the splitting process comprising modification of the affected nodes' group label.

6. Method according to claim 5, wherein the modification of group labels results in automatically assigning a common group label to the nodes of one resulting group of nodes, and either automatically assigning another common group label to the nodes of the other resulting group of nodes, or leaving the common group label of said nodes of said other resulting group of nodes unchanged.

7. Method according to claim 1, wherein communication and cooperation between nodes belonging to different groups of nodes is allowed, if the following conditions are fulfilled, namely
the first condition being that a requesting node belongs to a first group of nodes, the group of nodes being connected to at least one other, second group of nodes, the second condition being that said second group of nodes can detect unambiguously that the request was launched from said first group of nodes, the third condition being that for the second group of nodes it is explicitly allowed to communicate and cooperate with the first group of nodes, and the fourth condition being that the content or service requested by said first group of nodes is available within said second group of nodes, and released by said second group of nodes, the release referring explicitly to said first group of nodes, or the release referring to a number of groups of nodes including said first group of nodes.

8. Method according to claim 7, wherein the third condition is further specified such that if a first group of nodes is allowed to cooperate with a second group of nodes, then said second group of nodes is also allowed to cooperate with said first group of nodes.

9. Method according to claim 7, wherein the third condition is further specified such that if a first group of nodes is allowed to cooperate with a second group of nodes, and the second group of nodes is allowed to cooperate with a third group of nodes, then this constellation leads to that said first group of nodes is allowed to cooperate with said third group of nodes, either with or without interaction of said second group of nodes.

10. Method according to claim 1, wherein said group label is detached automatically from any node when being disconnected from said group of nodes.

11. Method according to claim 1, wherein a connection between two nodes has a status, the status defining whether both connected nodes belong to the same group of nodes or not.

12. An apparatus for creating and maintaining a unique electronic group label, the apparatus being associated with a technical device being a first node in a network, and the group label indicating membership in a group of technical devices being nodes in the network, the nodes being capable of providing services or resources to other nodes of the network and using services or resources provided by other nodes of the network, wherein the group label is used for identifying the group and individual nodes are identified by other unique labels, **characterized in** that the apparatus comprises

- means for detecting if a second node connected to said first node has a group label associated;
- means for automatically creating a group label when being connected to the second node, if neither of said two nodes has already a group label associated;
- means for associating the automatically created group label to the first node if neither of said two nodes has already a group label associated, wherein nodes can have only one group label associated at a time;
- means for detecting if the second nodes group label is the same as the first nodes group label, if the second node has already a group label associated when connecting, and means for enabling communication between the two nodes if their group labels are identical.